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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/534,702

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Ottorino Vendramelli

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WENDEROTH, LIND & PONACK, L.L.P.

1030 15th Street, N.W.,

Suite 400 East

Washington, DC 20005-1503

EXAMINER

DAVIS, ROBERT B

ART UNIT

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/534,702	<b>Applicant(s)</b> VENDRAMELLI ET AL.	
	<b>Examiner</b> Robert B. Davis	<b>Art Unit</b> 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1 and 3-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weiss (5,648,026: figure 5; column 5, lines 4—to column 25, line 30) and Cutler (4,592,239: figures 1-9).

4. Weiss discloses a blow molding apparatus comprising a blow molding die (represented by bottle 45) having a cavity, a main conduit for supplying gas to the die, a low pressure gas supply source (15) connected to the main conduit via a first supply channel (having valve 44), a controlled valve (44), a high pressure gas supply source (16) connected via a second supply channel, and a second controlled valve (43). The

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reference does not disclose means for measuring the presence or absence of a gas flow through the channel.

5. Noguchi et al disclose a blow molding apparatus having defective article determination and discharging stations associated with monitoring of the molding processing equipment during the molding, the apparatus comprising: a blowing air flow meter (314) and a blow air pressure detector (315) within an air supply path, a defective article discrimination control device (300) responsive to the result of detection of the blow air flow meter to output the defective article indicative signal when the blowing air flow meter continues detection of air flow beyond a given period of when the blowing air pressure is lower than a preset pressure of the input device (310).

6. Cutler discloses multiple pitot tubes (10 and 10a) having entrances (14 and 14a) connected to ports (18 and 18a) to measure the flow of gas within a conduit (4). The reference also discloses a partitioned tube (2) having hollow sections (10 and 30) separated by a partition (8) which feed ports (18 and 34) for measuring flow within a conduit (4) by pressure differential. The reference also discloses spaced pitot tubes (figure 9). The reference states that by measuring the pressure differential within a flow supply tube overcomes problems with detecting the pressure at the surface of a tube surface.

7. It would have been obvious at the time of the invention to one of ordinary skill in the art to modify the apparatus of Weiss by using an air flow meter and blow air pressure detector within an air supply path to a blowing means of a blow mold as disclosed by Noguchi et al for the purpose of real time determination of defective blown

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articles while the article is being molded to avoid costly post mold testing equipment.

This equates to combining prior art elements known in the blow molding arts to yield predictable results of detecting faulty blown articles while the article is being blown. See *KSR Int'l Co. v. Teleflex Inc.*, 82 USPQ2d 1385. It would have been further obvious at the time of the invention to one of ordinary skill in the art to modify the apparatus of the previous combination by using either multiple pitot tubes or a partitioned pitot tube to determine flow rate based upon differential pressure in a conduit as disclosed by Cutler because such use of pitot tubes was well known in the art as a flow meter and one of ordinary skill in the art would expect such a flow meter to function to determine pressure of the fluid within a conduit. The use of the pitot tubes of Cutler equates to an obvious to try rationale of choosing a well known flow meter for replacement in the combination of Weiss and Noguchi et al.

### ***Response to Arguments***

8. Applicant's arguments filed 12/22/08 have been fully considered but they are not persuasive. Applicants assert that the mere fact that references can be combined or modified does not render obvious the resultant combination unless the results would have been predictable to one of ordinary skill in the art. Specifically, the present invention includes the use of a high pressure gas supply source connected to a main conduit via a second supply channel wherein the second supply channel also includes a differential pressure measuring device operable to detect and measure gas flow passing through the second supply channel at a pre-determined time after a blow-molding phase has started. The examiner does not agree that the results are not predictable to one of

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ordinary skill in the art. The reference to Noguchi et al disclose a pressure detector in a blow air supply line to detect rupturing or exploding of a container in real time as the container is blown. The reference to Weiss discloses a low pressure air supply line and a high pressure supply line for feeding low and high pressure air to a blow mold as is well known in the art to pre-blow the parison using low pressure air and then high pressure air to force the parison against the cavity of the mold to ensure transfer of details of the molding surface of the cavity and to ensure proper cooling due to close contact of the blown plastic with the mold. Thus, modification of the blow mold of Weiss would lead one of ordinary skill in the art to place the pressure detector in the high pressure air supply line as such is used for final blowing and cooling of the article within the mold. This is reinforced by the fact that the low pressure air is normally at such a pressure that the parison is not fully expanded within the mold. The proposed combination of Weiss and Noguchi et al thus suggest a blow mold having a pressure detector in the high pressure supply line for detecting rupturing or exploding of a container during the blowing step of the process. Given the structure of the combination of Weiss and Noguchi et al one of ordinary skill in the art would look to the pressure measurement art based on the disclosure of Noguchi et al and the use of a pressure detector in the blow air supply line. One of ordinary skill in the art would expect the pitot tubes of Cutler to work at least as well as the generic pressure detector of Noguchi et al.

9. Applicants assert that the proposed combination of the cited prior art would modify the principle operation of the apparatus of Weiss; however, Weiss is used as the primary reference due to the fact that Noguchi et al only disclose one blowing air supply

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line. The pitot tubes of Cutler are suggested as modification of the combination of Weiss and Noguchi et al. The incorporation of the pressure detector of Noguchi et al to the gas supply line of Weiss would not change the operation of Weiss with the exception that real time explosions or ruptures can be detected. Substitution of the Pitot tube differential pressure detectors of Cutler for the pressure detectors of Noguchi et al would not materially change the operation of the combination of Weiss and Noguchi et al.

10. Applicants assert that the only way to arrive at the present invention is by impermissible hindsight. The examiner disagrees as Noguchi et al clearly suggests a pressure detector in a gas supply line to a blow mold. The substitution of a well known pressure detection means in the pitot tubes of Cutler for the pressure detector of Noguchi et al in the combination of Weiss and Noguchi et al would have been within the ordinary skill in the art as the ordinary skill in the art includes not only blow molds and blow air supply devices as disclosed by Weiss and Noguchi et al, but also the pressure detection mechanisms based on the disclosure of Noguchi et al. The obvious to try rationale of substituting the pitot tubes of Cutler was in regards to the combination of Weiss and Noguchi et al. Finally, there does not appear to be any synergy between the use of a pressure differential detector and the blow air supply line as claimed. Applicant has merely combined well known pressure detection means into a known blow mold assembly.

***Conclusion***

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert B. Davis whose telephone number is 571-272-1129. The examiner can normally be reached on Monday-Friday 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on 571-272-1316. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Robert B. Davis/  
Primary Examiner, Art Unit 1791  
3/13/09